on the COVER

A Florida redbelly turtle and a common moorhen share a typical freshwater habitat

Field work is an essential component of District environmental restoration projects

A DAY AT THE DISTRICT

"I've been at the District 10 years doing this job, and I wouldn't want to do any other."

– THERESE EAST

Get Your Feet Wet with...

Therese East

Staff Environmental Scientist
Lake Okeechobee

As a new regular column in WaterMatters*, we invite you to "get your feet wet" as you spend a day on the job with the people behind the projects featured in our stories.*

Therese East spends many a work day analyzing blooms. They're not rose blooms or chrysanthemum blooms. East monitors phytoplankton blooms in Lake Okeechobee. And her work station is often on a boat. East works with partner, Environmental Scientist Andy Rodusky, to collect water samples at 10 locations around Lake Okeechobee's shore, including sites near major drinking water intake structures, such as those supplying Clewiston and Pahokee, and lake areas with high recreational use.

Phytoplankton are simple plants: blue-green bacteria that grow with light and nutrients and are an essential part of the aquatic food chain. Excessive growth can cause problems with taste and odor of drinking water or toxins harmful to fish, wildlife, and domestic animals. "Phytoplankton are always present in the water," East said, "but we have to be on the lookout for major blooms that can produce toxins."

East launches a boat into the lake several days a week in the summer, but less often in winter, to gather water samples. On a day in June, she declared, "This is a perfect day for sampling. During bad weather we can actually have 2 1/2 foot waves in this shallow lake, and storms come up fast." Rodusky added the crew can take a pounding in the aluminum-hulled boat and the bow can go under when the lake is choppy, so they must be vigilant in observing weather conditions.

The pair comes prepared with labeled water collection bottles, which they fill with samples from the 10 areas. Samples are sent to the District's chemistry lab for water quality analysis and also to special, contracted labs that determine exactly how much of which phytoplankton, and which toxins are present in each sample. "There are three specific toxins that blooms can produce," East said.

East also makes a visual check of the water's appearance – does it look clear, cloudy, green, etc. – then enters her observation onto a survey form. "Today the color looks as though it's from turbidity rather than a high presence of phytoplankton," she said. The information is being used for a study to determine how the appearance of the water correlates to actual bloom conditions.

Other "tools of the trade" used by East include a Secchi Disk, a device lowered into the water to determine the depth at which light penetrates into the water column, and a water sampler that measures water temperature, dissolved oxygen, and water conductivity. The information is compiled into a database to generate scientific data to help manage the lake, and will help assess the success of the Lake Okeechobee Protection Program by looking at the lake conditions as examined through changes in water quality and the associated flora and fauna.

And yes, this means some days are spent at a computer.

"I've been at the District 10 years doing this job, and I wouldn't want to do any other," East said. "I work with a cohesive group of scientists, and we often assist with each other's projects. Not only can we count on our group to achieve project goals, but we have fun while doing it," she said.

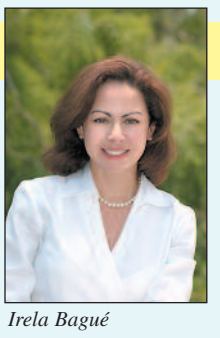
Therese East partners with Andy Rodusky to collect and label water samples in brown-colored collection jars from various sites around Lake Okeechobee's shore.

Water Ways of Yesteryear

Dateline: 1915

Same job, different goals. In 1915 this surveying crew went to work in the Everglades, identifying boundaries and elevations for upcoming drainage projects. "The Everglades will prove to be the richest of lands when the drainage work is completed," promised a 1910 real estate catalogue.

Surveyors still work in the Everglades. As employed by the South Florida Water Management District, they are part of the Everglades restoration effort, helping to undo decades of damage to this unique ecosystem. Accurate surveying of boundaries, historical flood lines and elevations is essential for identifying and purchasing lands needed for Everglades restoration.



Irela Bagué

Championing Our Employees

Earlier this year, the District adopted its first comprehensive Strategic Plan – providing the agency with clear direction and focus for the next 10 years. Along with critical environmental restoration and resource management responsibilities, the Governing Board also identified employees as a strategic priority.

Governing Board member Irela Bagué, Chair of the Governing Board's Human Resources (HR) Committee and a former water management district employee herself, is quick to recognize the value of staff to the overall success of the agency. "We could not accomplish our goals without the passion, motivation and expertise of our employees," she said. "They are the very heart and soul of the District."

What's at the top of her "to do" list? Promote a quality work environment that is both challenging and rewarding – and that fosters a camaraderie and commitment that extends beyond the workplace.

To open communication channels and to create a forum for bringing ideas, concerns and solutions to the table, Bagué has initiated a series of well-received informal meetings that bring her face-to-face with agency staff. That input will be invaluable as she and her fellow Board members consider employee-related policies and issues. She also advocates the empowerment of an internal, peer-level committee of employees to help identify, recommend and act on initiatives for the benefit of co-workers.

"At the South Florida Water Management District, we have a tough job to do," Bagué said. "But our people are more than up to the task, and we want them to know that we consider them our most valuable asset in managing and protecting South Florida's water resources."